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09/888,095	06/22/2001	Louis Arquie	K35A0772	7928

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EXAMINER
HARRISON, CHANTE E

ART UNIT	PAPER NUMBER
2672	7

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/888,095

**Applicant(s)**

ARQUIE ET AL.

**Examiner**

Chante Harrison

**Art Unit**

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is responsive to communications: Amendment A, filed on 9/17/03.

***This action is made FINAL.***

2. Claims 1-16 are pending in the case. Claims 1, 10 and 12 are independent claims. Claims 12-16 are newly added.

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "428". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stephen Grau et al., U.S. Patent 6,067,093, 5/2000.

As per claims 1, 10 and 11, Grau discloses forming a first layer of a multi-layer representation wherein at least two nodes are represented separately (Fig. 11 "1120" & "D & E" as labeled by Examiner); grouping the nodes of the first layer into group nodes to form a second layer in the multi-layer representation (Fig. 11 "1110"); grouping the group nodes of the second layer into a third layer, the third layer having at least one connected-superset node containing group nodes with nodes connected to each other (Fig. 11 "A" as labeled by Examiner), and at least one isolated-superset node containing group nodes having nodes isolated from each other (Fig. 11 "B" as labeled by Examiner); and displaying (Fig. 6) the superset nodes in the third layer so the connected-superset node is separate from the isolated-superset node (Fig. 11).

Grau fails to specifically disclose the connected-superset node is selectively expandable to display group nodes and connections between the nodes, and the isolated-superset node is selectively expandable to display group nodes of the second layer. It would have been obvious to one of skill in the art to include selectively expanding the

connected-superset node to display group nodes and connections between the nodes and selectively expanding the isolated-superset node to display group nodes of the second layer in the disclosure of Grau because Grau teaches a user interface selective component that allows viewing of different aspects of the tree structure of a network topology (col. 4, ll. 40-45) and retrieving tree data describing the structure and layout of selected maps (col. 5, ll. 3-13), which are replaced by larger nodes when grouped (col. 10, ll. 50-56).

As per dependent claim 2, Grau discloses creating a graph of nodes to be displayed in the network as a leaf graph (Fig. 11; col. 1, ll. 53-57).

As per dependent claim 3, Grau discloses the leaf graph includes components and interconnection paths of the network (col. 1, ll. 54-61; col. 3, ll. 14-20).

As per dependent claim 4, Grau discloses group nodes in the connected superset node are laid out according to layout rules (col. 1, ll. 25-30, 54-61; col. 3, ll. 44-47)..

As per dependent claim 5, Grau discloses the group nodes in the connected superset node comprises any one or more of switch groups (i.e. router) and host groups (i.e. LAN) (col. 3, ll. 14-18, 44-48; col. 1, ll. 54-61).

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As per dependent claim 6, Grau discloses a layout rule consists of the switch group with the highest connectivity (i.e. parent node) being placed in the center of the connected-superset node (col. 9, ll. 20-27; col. 10, ll. 35-45).

As per dependent claim 7, Grau fails to specifically disclose the connected-superset node is fully expandable while the isolated-superset node is minimized. It would have been obvious to one of skill in the art to include fully expanding the connected-superset node while the isolated-superset node is minimized in the disclosure of Grau because Grau teaches a user interface selective component that allows viewing of different aspects of the tree structure of a network topology (col. 4, ll. 40-45) having nodes that have been replaced by larger nodes as a result of grouping (col. 10, ll. 50-56).

As per dependent claim 8, Grau discloses the isolated-superset node comprises any one or more of unmapped hubs (i.e. server) and isolated switches (i.e. router).because Grau teaches that each node represents a computer system (i.e. server) having a router and a map representing a portion of the interconnected computers and routers (i.e. hubs and switches), thereby allowing the display of a single node to represent a computer (i.e. LAN) that is not connected to another LAN in the network.

As per dependent claim 9, Grau discloses the isolated group node consists of isolated devices other than unmapped hubs and isolated switches (abstract; col. 6, ll. 2-7).

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As per independent claim 12, Grau discloses a method of displaying nodes within a network topology comprising multiple layers (Fig. 6) as claimed in claim 1. Therefore the rationale applied in the rejection of claim 1 applies herein.

As per dependent claim 13, Grau discloses the grouping criteria are based on functional relationships (col. 5, ll. 3-7).

As per dependent claim 14, Grau discloses the function relationships are defined to not require physical proximity in the network (col. 5, ll. 7-13).

As per dependent claim 15, Grau discloses during the expansion of the group nodes, continuing to display connections of the displayed nodes to remaining ones of the group nodes that have not been expanded (col. 7, ll. 44-54).

As per dependent claim 16, Grau discloses the sets of nodes include a connected-superset node containing nodes connected to each other (Fig. 11 "A" as labeled by Examiner), and an isolated-superset node containing a set of nodes not connected to other nodes (Fig. 11 "B" as labeled by Examiner).

***Response to Arguments***

3. Applicant's arguments filed 9/17/03 have been fully considered but they are not persuasive.

Applicant argues (pp. 11) Grau fails to suggest one isolated-superset node containing group nodes having nodes isolated from each other.

In response, Grau teaches group nodes (i.e. Fig. 11 "1120") having nodes isolated from each other (i.e. Fig. 11 "D & E" as labeled by Examiner).

Applicant argues (pp. 11) Grau fails to suggest supersets being selectively expandable to display group nodes of the second layer.

In response, Grau teaches displaying atlas objects (i.e. hierarchical maps of nodes) (col. 3, ll. 60-64; col. 6, ll. 30-34), where the display of the maps may be a tree browser (col. 7, ll. 50-54). Grau teaches the display of the tree browser allows for selective display of the maps (i.e. groups) within the overall display (i.e. network) structure, where the selective display of a map (i.e. group) results in the display of components of the map (i.e. group) (Fig. 6; col. 7-9, ll. 35-10).



Applicant argues (pp. 12, Para 2) Grau does not teach superset nodes as defined by Applicant's specification, which identifies a superset node as nodes grouped on a leaf graph and representing network devices.

In response, Grau teaches a leaf graph (Fig. 11) of grouped nodes (i.e. nodes encircled; Fig. 11) where the nodes represent network devices (col. 1, ll. 54-61; col. 3, ll. 14-20).

Applicant argues with respect to claim 10, Grau does not disclose superset node not connected to any other nodes belonging to other connected superset nodes, as illustrated in Applicants Fig. 5.

In response, Grau discloses a superset node not connected to any other nodes belonging to other connected superset nodes for example at Fig. 11, where group nodes of "1110" are not connected to group nodes of "1140".

Applicant argues Grau fails to disclose the newly added features of claims 12-16.

In response, Grau teaches the newly added features of claims 12-16 as indicated in the above rejection of the claims.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

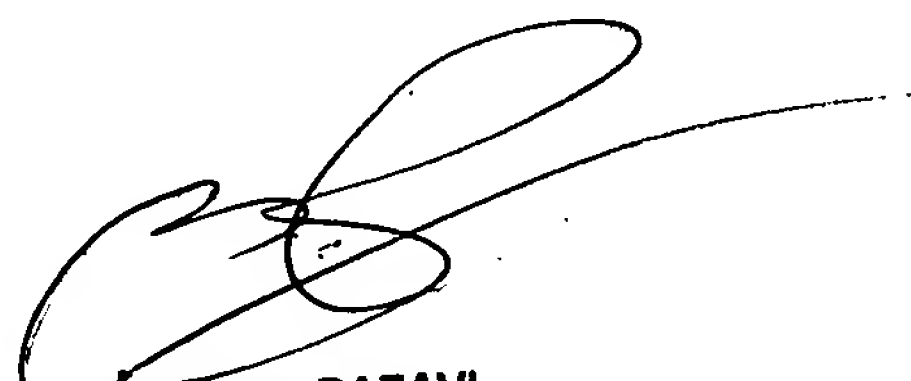
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 703-305-3937. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Chante Harrison  
Examiner  
Art Unit 2672

December 29, 2003

  
MICHAEL RAZAVI  
SUPERVISORY PATENT EXAMINER  
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